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                (ROSPATENT) added to list of core patent offices covered
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                data from INPADOC
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded
     7 MAR 02 GBFULL: New full-text patent database on STN
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NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced
     11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY
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     12 MAR 22 PATDPASPC - New patent database available
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     13 MAR 22
                REGISTRY/ZREGISTRY enhanced with experimental property tags
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NEWS 14 APR 04 EPFULL enhanced with additional patent information and new
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     18 APR 28
                U.S. patent records in CA/CAplus
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             MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
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=> index bioscience

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BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, ...' ENTERED AT 14:23:54 ON 09 MAY 2005

75 FILES IN THE FILE LIST IN STNINDEX

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- 412 FILE BIOTECHNO
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- 267 FILE CONFSCI
- 15 FILE CROPB
- 59 FILE CROPU
- 5 FILE DDFB
- 869 FILE DDFU 76 FILE DGEN
- 76 FILE DGENE 553 FILE DISSABS
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- 82 FILE EMBAL
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- 526 FILE LIFESCI
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=> s preconditioning (p) mitochondria PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH FIELD CODE - 'AND' OPERATOR ASSUMED 'DITIONING (P) MITOCHOND' PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH FIELD CODE - 'AND' OPERATOR ASSUMED 'DITIONING (P) MITOCHOND' 1261 PRECONDITIONING (P) MITOCHONDRIA

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6 FILES SEARCHED...

15 L3 AND (ISOCITRATE(W) DEHYDROGENASE(W) NAD(W) ALPHA(W) SUBUNIT L4OR SUCCINYL(W) COA(W) LIGASE OR ATP(W) SYNTHASE OR DIHYROLIPOAMI DE(W) SUCCINYLTRANSFERASE OR UBIQUINOL(W) CYTOCHROME(W) C(W) OXIDOREDUCTASE OR NADH(W) UBIQUINONE(W) OXIDOREDUCTASE)

=> d 14 ibib ti abs 1-15

ANSWER 1 OF 15 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on T.4

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2004:489036 SCISEARCH ACCESSION NUMBER:

THE GENUINE ARTICLE: 822TJ

TITLE:

Diazoxide affects the IF1 inhibitor protein binding to F-1

sector of beef heart F(0)F(1)ATPsynthase

AUTHOR: CORPORATE SOURCE:

Contessi S; Metelli G; Mavelli I; Lippe G (Reprint) Univ Udine, Dept Biomed Sci & Technol, Ple Kolbe 4,

I-33100 Udine, Italy (Reprint); Univ Udine, Dept Biomed Sci & Technol, I-33100 Udine, Italy; Univ Udine, MATI Ctr

Excellence, I-33100 Udine, Italy

COUNTRY OF AUTHOR:

SOURCE:

Italv

BIOCHEMICAL PHARMACOLOGY, (15 MAY 2004) Vol. 67, No. 10,

pp. 1843-1851.

Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD,

LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND.

ISSN: 0006-2952. Article; Journal

DOCUMENT TYPE:

English

LANGUAGE: REFERENCE COUNT:

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

Diazoxide affects the IF1 inhibitor protein binding to F-1 sector of beef TI heart F(0)F(1)ATPsynthase

Diazoxide, a selective opener of the mitochondrial ATP-sensitive K+ AΒ channel (mitoK(ATP)), has been reported to enhance F(0)F(1)ATPsynthase inhibition during ischemia, but the underlying mechanisms are still unclear. Here, we demonstrate that diazoxide directly interacts with the F-1 sector of beef heart F(0)F(1)ATPsynthase markedly promoting the binding of the inhibitor protein (IF1) to beta subunit. More specifically, the treatment of soluble F-1 with one equivalent of diazoxide was sufficient to decrease the K-d of IF1-F-1 complex at low pH. Such effect was revealed only on the cycling enzyme, while no effect was observed in the absence of Mg-ATP. However, diazoxide binding occurred independently from the catalysis, as shown by the structural changes induced by the drug in not catalytically active F-1 and revealed by CD

spectra. In addition, kinetic analysis of ATP hydrolysis demonstrated that diazoxide exerts a stabilising role on Mg-ADP bound in the catalytic site of the beta subunit adopting the tight conformation (beta(DP)). In accordance, a stabilising effect of Mg-ADP at the nucleotide binding domain (NBD) has been reported also for K-ATP channel. These results suggest that diazoxide binds to beta subunit at NBD, which is highly conserved in the ATP-binding cassette protein family, thus inducing nucleotide stabilisation and favouring F-1 conformation suitable for IF, binding. Finally, diazoxide also increased IF1 binding to membrane bound F1, while it did not influence the energisation-dependent IF1 release. As IF1 binding mediates the F(0)F(1)ATPsynthase inhibition, we suggest that such mechanism may contribute to cardioprotection during ischemia. (C) 2004 Elsevier Inc. All rights reserved.

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)

ACCESSION NUMBER: 2003:972343 SCISEARCH

THE GENUINE ARTICLE: 739VH

TITLE: ATP-sensitive K+ channels in renal mitochondria

AUTHOR: Cancherini D V; Trabuco L G; Reboucas N A; Kowaltowski A J

(Reprint)

CORPORATE SOURCE: Av Prof Lineu Prestes 748, Cidade Univ, BR-05508900 Sao

Paulo, Brazil (Reprint); Univ Sao Paulo, Dept Fisiol & Biofis, Inst Ciencias Biomed, BR-05508900 Sao Paulo, Brazil; Univ Sao Paulo, Dept Bioquim, Inst Quim,

BR-05508900 Sao Paulo, Brazil

COUNTRY OF AUTHOR: Brazil

SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY-RENAL PHYSIOLOGY, (DEC 2003

Vol. 285, No. 6, pp. F1291-F1296.

Publisher: AMER PHYSIOLOGICAL SOC, 9650 ROCKVILLE PIKE,

BETHESDA, MD 20814 USA.

ISSN: 0363-6127. Article; Journal

DOCUMENT TYPE: Article;
LANGUAGE: English

REFERENCE COUNT: 38

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

TI ATP-sensitive K+ channels in renal mitochondria

AB Isolated kidney mitochondria swell when incubated in hyposmotic solutions containing K+ salts in a manner inhibited by ATP, ADP, 5-hydroxydecanoate, and glibenclamide and stimulated by GTP and diazoxide. These results suggest the existence of ATP-sensitive K+ channels in these mitochondria, similar to those previously described in heart, liver, and brain. Renal mitochondrial ATP-sensitive K+ uptake rates are similar to140 nmol . min(-1) . mg protein(-1). This K+ transport results in a slight increase in respiration and decrease in the inner membrane potential. In addition, the activation of ATP-inhibited K+ uptake using diazoxide leads to a decrease of ATP hydrolysis through the reverse activity of the FOF1 ATP synthase when respiration is inhibited. In

conclusion, we characterize an ATP-sensitive K+ transport pathway in kidney mitochondria that affects volume, respiration, and membrane potential and may have a role in the prevention of mitochondrial ATP hydrolysis.

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ACCESSION NUMBER: 2000:931072 SCISEARCH

THE GENUINE ARTICLE: 379KX

TITLE: Myocardial ischemic preconditioning and mitochondrial

F1F0-ATPase activity

AUTHOR: Bosetti F (Reprint); Yu G Y; Zucchi R; RoncaTestoni S;

Solaini G

CORPORATE SOURCE: NIA, SECT BRAIN PHYSIOL & METAB, NIH BLDG 10, ROOM 6N202,

9000 ROCKVILLE PIKE, BETHESDA, MD 20892 (Reprint); SCUOLA

SUPER STUDI UNIV & PERFEZIONAMENTO S ANNA, PISA, ITALY; UNIV PISA, SEZ CHIM & BIOCHIM MED, DIPARTIMENTO SCI UOMO &

AMBIENTE, I-56100 PISA, ITALY

COUNTRY OF AUTHOR:

USA; ITALY

SOURCE:

MOLECULAR AND CELLULAR BIOCHEMISTRY, (DEC 2000) Vol. 215,

No. 1-2, pp. 31-37.

Publisher: KLUWER ACADEMIC PUBL, SPUIBOULEVARD 50, PO BOX

17, 3300 AA DORDRECHT, NETHERLANDS.

ISSN: 0300-8177.

DOCUMENT TYPE:

Article; Journal

FILE SEGMENT:

LIFE

LANGUAGE:

English

REFERENCE COUNT:

39

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

TI Myocardial ischemic preconditioning and mitochondrial F1F0-ATPase activity
AB A short period of ischemia followed by reperfusion (ischemic
preconditioning) is known to trigger mechanisms that contribute to

the prevention of ATP depletion. In ischemic conditions, most of the ATP hydrolysis can be attributed to mitochondrial F1F0-ATPase (ATP synthase). The purpose of the present study was to examine the effect of myocardial ischemic preconditioning on the kinetics of ATP hydrolysis by F1F0-ATPase. Preconditioning was accomplished by three 3-min periods of global ischemia separated by 3 min of reperfusion. Steady state ATP hydrolysis rates in both control and preconditioned mitochondria were not significantly different. This suggests that a large influence of the enzyme on the preconditioning mechanism may be excluded. However, the time required by the reaction to reach the steady state rate was increased in the preconditioned group before sustained ischemia, and it was even more

enhanced in the first 5 min of reperfusion (101 +/- 3.0 sec in preconditioned vs. 83.4 +/- 4.4 sec in controls, p < 0.05). These results suggest that this transient increase in activation time may contribute to the cardioprotection by slowing the ATP depletion in the very critical early phase of post-ischemic reperfusion.

L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:692747 CAPLUS

DOCUMENT NUMBER:

141:241156

TITLE:

Ischemic preconditioning exaggerates cardiac damage in

PKC-δ null mice

AUTHOR(S):

Mayr, Manuel; Metzler, Bernhard; Chung, Yuen-Li;

McGregor, Emma; Mayr, Ursula; Troy, Helen; Hu, Yanhua; Leitges, Michael; Pachinger, Otmar; Griffiths, John

R.; Dunn, Michael J.; Xu, Qingbo

CORPORATE SOURCE:

Department of Cardiac and Vascular Sciences, St.

George's Hospital Medical School, London, SW17 ORE, UK American Journal of Physiology (2004), 287(2, Pt. 2),

SOURCE:

H946-H956

PUBLISHER:

CODEN: AJPHAP; ISSN: 0002-9513 American Physiological Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

TI Ischemic preconditioning exaggerates cardiac damage in PKC- $\delta$  null mice

AB Ischemic preconditioning confers cardiac protection during subsequent ischemia-reperfusion, in which protein kinase C (PKC) is believed to play an essential role, but controversial data exist concerning the PKC- $\delta$  isoform. In an accompanying study, the authors described metabolic changes in PKC- $\delta$  knockout mice. The authors now explore their effect on early preconditioning. Both PKC- $\delta$ -/- and PKC- $\delta$ +/+ mice underwent three cycles of 5-min left descending artery occlusion/5-min reperfusion, followed by 30-min occlusion and 2-h reperfusion. Unexpectedly, preconditioning exaggerated

ischemia-reperfusion injury in PKC- $\delta$ -/- mice. Whereas ischemic preconditioning increased superoxide anion production in PKC- $\delta$ +/+ hearts, no increase in reactive oxygen species was observed in PKC- $\delta$ -/hearts. Proteomic anal. of preconditioned PKC- $\delta$ +/+ hearts revealed profound changes in enzymes related to energy metabolism, e.g., NADH dehydrogenase and ATP synthase, with partial fragmentation of these mitochondrial enzymes and of the E2 component of the pyruvate dehydrogenase complex. Interestingly, fragmentation of mitochondrial enzymes was not observed in PKC- $\delta$ -/- hearts. High-resolution NMR anal. of cardiac metabolites demonstrated a similar rise of phosphocreatine in PKC- $\delta$ +/+ and PKC- $\delta$ -/- hearts, but the preconditioning-induced increase in phosphocholine, alanine, carnitine, and glycine was restricted to PKC- $\delta$ +/+ hearts, whereas lactate concns. were higher in PKC- $\delta$ -/- hearts. Taken together, the authors' results suggest that reactive oxygen species generated during ischemic preconditioning might alter mitochondrial metabolism by oxidizing key mitochondrial enzymes and that metabolic adaptation to preconditioning is impaired in PKC- $\delta$ -/- hearts.

REFERENCE COUNT:

51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:668326 CAPLUS

DOCUMENT NUMBER:

139:290251

TITLE:

Ischaemic preconditioning and a mitochondrial KATP channel opener both produce cardioprotection

accompanied by F1F0-ATPase inhibition in early

ischaemia

AUTHOR(S): CORPORATE SOURCE: Ala-Rami, Antti; Ylitalo, Kari V.; Hassinen, Ilmo E. Department of Medical Biochemistry and Molecular Biology, University of Oulu, Oulu, 90014, Finland

SOURCE:

Basic Research in Cardiology (2003), 98(4), 250-258

CODEN: BRCAB7; ISSN: 0300-8428

PUBLISHER:

Steinkopff Verlag

DOCUMENT TYPE:

Journal English

LANGUAGE: End

TI Ischaemic preconditioning and a mitochondrial KATP channel opener both produce cardioprotection accompanied by F1F0-ATPase inhibition in early ischaemia

Ischemic preconditioning gives powerful protection against prolonged AB ischemia affecting several intracellular regulatory and messenger pathways, although their mutual importance is far from established. Protective, preconditioning-like effects have been reported for KATP channel openers, and most of the evidence points to the mitochondrial KATP channels. We show here that the KATP channel opener diazoxide, which acts selectively on the mitochondrial channel, causes potentiation of ischemic inhibition of mitochondrial ATP synthase (F1F0-ATPase) along with cardioprotection. These effects are comparable with that of ischemic preconditioning. The administration of diazoxide did not affect the cellular energy state as monitored with 31P NMR. The actions of both diazoxide and ischemic preconditioning were prevented by 5-hydroxydecanoate, a specific inhibitor of the mitochondrial KATP channel. Thus mitochondrial KATP channel opening and ischemic preconditioning must share common mechanisms of action involving mitochondrial F1F0-ATPase, although involvement of the energy state in protection could not be proved.

REFERENCE COUNT:

THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER: 2004-0590987 PASCAL

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TITLE (IN ENGLISH): F.sub.0f.sub.1 ATP synthase

activity is differently modulated by coronary reactive

hyperemia before and after ischemic

preconditioning in the goat

PENNA Claudia; PAGLIARO Pasquale; RASTALDO Raffaella; AUTHOR:

> DI PANCRAZIO Francesca; LIPPE Giovanna; GATTULLO Donatella; MANCARDI Daniele; SAMAJA Michele; LOSANO

Gianni; MAVELLI Irene

CORPORATE SOURCE: Sezione di Fisiologia, Dipartimento di Neuroscienze

and Dipartimento di Scienze Cliniche e Biologiche, Universita di Torino, 10100 Turin, United States; Dipartimento di Scienze e Tecnologie Biomediche and Centro di Eccellenza Micro gravity, Aging, Training, and Immobility, Universita di Udine, 33100 Udine,

Italy; Dipartimento di Medicina, Chirurgia, e

Odontoiatria, Universita di Milano, 20100 Milan, Italy American journal of physiology. Heart and circulatory

physiology, (2004), 56(5), H2192-H2200, 48 refs.

ISSN: 0363-6135 CODEN: AJPPDI

DOCUMENT TYPE: Journal BIBLIOGRAPHIC LEVEL: Analytic United States COUNTRY:

LANGUAGE: English

INIST-670D, 354000122491250390 AVAILABILITY: TIEN F.sub.0f.sub.1 ATP synthase activity is differently

modulated by coronary reactive hyperemia before and after ischemic preconditioning in the goat

ΔN 2004-0590987 **PASCAL** 

SOURCE:

CP

Copyright .COPYRGT. 2004 INIST-CNRS. All rights reserved. The amplitude of coronary reactive hyperemia (CRH), elicited by 15 s of AB ischemia, is reduced in hearts subjected to 5 min of ischemic preconditioning (IP). F.sub.0F.sub.1ATP synthase activity and ATP concentration are also altered by IP. We hypothesized that F.sub.0F.sub.1 ATP synthase is differently modulated by the inhibitor protein IF.sub.1 during CRH elicited before (CRH.sub.n.sub.p) and after (CRH.sub.p.sub.r.sub.e.sub.c) IP. Hemodynamic parameters were recorded in 10 anesthetized goats. Myocardial biopsies were obtained before IP (C.sub.n.sub.p), during CRH.sub.n.sub.p, 4 and 6 min after the onset of CRH.sub.n.sub.p, after IP (C.sub.p.sub.r.sub.e.sub.c), during CRH.sub.p.sub.r.sub.e.sub.c, and 4 min after CRH.sub.p.sub.r.sub.e.sub.c. F.sub.OF.sub.1ATP synthase activity, ATP concentration, and ATP-to-ADP ratio (ATP/ADP) were determined. Compared with CRH.sub.n.sub.p, IP blunted CRH.sub.p.sub.r.sub.e.sub.c. F.sub.0F.sub.1 ATP synthase activity transiently increased during CRH.sub.n.sub.p, decreased 4 min after CRH.sub.n.sub.p, and returned to control 2 min later; it was lower after IP (C.sub.p.sub.r.sub.e.sub.c) and did not change during and after CRH.sub.p.sub.r.sub.e.sub.c. All these changes in activity were modulated by IF.sub.1. During CRH.sub.n.sub.p, ATP concentration and ATP/ADP were reduced compared with C.sub.n.sub.p and began to rise 6 min thereafter. During C.sub.p.sub.r.sub.e.sub.c, both parameters were transiently reduced but increased during and after CRH.sub.p.sub.r.sub.e.sub.c. Hence, during CRH.sub.n.sub.p, F.sub.0f.sub.1 ATP synthase activity transiently increases and then decreases significantly. The shortlasting inhibition of the enzyme may explain why a few seconds of occlusion do not induce IP. After IP, F.sub.0F.sub.1 ATP synthase activity is blunted, and it is not affected by a subsequent 15 s of occlusion, which induces a blunted CRH.sub.p.sub.r.sub.e.sub.c. These results suggest that postischemic long-lasting inhibition of F.sub.0F.sub.1 ATP

synthase activity may be a feature of the preconditioned heart. The increase in ATP concentration after preconditioning is in

agreement with previous reports of reduced ATP hydrolysis by cytoplasmic

ATPases.

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on STN

ACCESSION NUMBER: 2004-0123853

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TITLE (IN ENGLISH): ATP-sensitive K.sup.+ channels in renal

mitochondria

CANCHERINI Douglas V.; TRABUCO Leonardo G.; REBOUCAS AUTHOR:

Nancy A.; KOWALTOWSKI Alicia J.

PASCAL

Departamento de Fisiologia e Biofisica, Instituto de CORPORATE SOURCE:

> Ciencias Biomedicas, Universidade de Sao Paulo, 05508-900 Sao Paulo, Brazil; Departamento de

Bioquimica, Instituto de Quimica, Universidade de Sao

Paulo, 05508-900 Sao Paulo, Brazil

American journal of physiology. Renal physiology, SOURCE:

(2003), 54(6), F1291-F1296, 38 refs.

DOCUMENT TYPE: Journal Analytic BIBLIOGRAPHIC LEVEL: COUNTRY: United States

LANGUAGE: English

INIST-670F, 354000118779340270 AVAILABILITY: TIEN ATP-sensitive K.sup.+ channels in renal mitochondria

2004-0123853 PASCAL

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Isolated kidney mitochondria swell when incubated in hyposmotic AR solutions containing K.sup.+ salts in a manner inhibited by ATP, ADP, 5-hydroxydecanoate, and glibenclamide and stimulated by GTP and diazoxide. These results suggest the existence of ATP-sensitive K.sup.+ channels in these mitochondria, similar to those previously described in heart, liver, and brain. Renal mitochondrial ATP-sensitive K.sup.+ uptake rates are .eqvsim.140 nmol.min.sup.-.sup.1.mg protein.sup.-.sup.1. This K.sup.+ transport results in a slight increase in respiration and decrease in the inner membrane potential. In addition, the activation of ATP-inhibited K.sup.+ uptake using diazoxide leads to a decrease of ATP hydrolysis through the reverse activity of the F.sub.0F.sub.1 ATP synthase when respiration is

inhibited. In conclusion, we characterize an ATP-sensitive K.sup.+ transport pathway in kidney mitochondria that affects volume, respiration, and membrane potential and may have a role in the prevention of mitochondrial ATP hydrolysis.

ANSWER 8 OF 15 USPATFULL on STN

INVENTOR(S):

ACCESSION NUMBER: 2004:327968 USPATFULL

Methods and compositions for modulating proteins TITLE:

modified in preconditioning against ischemia/hypoxia Eyk, Jennifer E. Van, Baltimore, MD, UNITED STATES Elliott, Steven T., Cockeysville, MD, UNITED STATES

Arrell, David Kent, Rochester, MN, UNITED STATES

NUMBER KIND DATE \_\_\_\_\_ A1 PATENT INFORMATION: US 2004259793 20041223

APPLICATION INFO.: US 2004-824027 A1 20040414 (10)

> NUMBER DATE \_\_\_\_\_\_

US 2003-463139P PRIORITY INFORMATION: 20030414 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

Licata & Tyrrell P.C., 66 East Main Street, Marlton, LEGAL REPRESENTATIVE:

NJ, 08053

12 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Page(s)

LINE COUNT:

Methods and compositions for modulating proteins modified in TТ

preconditioning against ischemia/hypoxia

Proteins modified by pharmacological preconditioning are provided. AΒ Compositions, methods and events for modulating these proteins and priming cells for preconditioning and inducing preconditioning in a cell, tissue or organ as well as methods for identifying new compositions and methods for such priming and induction are also provided. In addition, methods for diagnosing and monitoring preconditioning or ischemic, hypoxic, ischemic/reperfusion and hypoxic/reperfusion conditions or the ability of a cell, tissue or organ to survive injury by measuring modulation of one or more of these preconditioning proteins are provided.

ANSWER 9 OF 15 USPATFULL on STN

2003:176318 USPATFULL ACCESSION NUMBER:

TITLE: Methods to identify compounds affecting mitochondria

Marban, Eduardo, Lutherville, MD, United States INVENTOR(S):

O'Rourke, Brian, Sparks, MD, United States

PATENT ASSIGNEE(S): Johns Hopkins University, Baltimore, MD, United States

(U.S. corporation)

NUMBER KIND DATE US 6586241 PATENT INFORMATION: B1 20030701 US 2000-684730 20001006 (9) APPLICATION INFO.:

Continuation of Ser. No. US 1998-60774, filed on 15 Apr RELATED APPLN. INFO.:

1998, now patented, Pat. No. US 6183948

DOCUMENT TYPE: Utility GRANTED FILE SEGMENT:

PRIMARY EXAMINER: Lankford, Jr., Leon B.

LEGAL REPRESENTATIVE: Corless, Peter F., Edwards & Angell, LLP

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

14 Drawing Figure(s); 6 Drawing Page(s) NUMBER OF DRAWINGS:

1039 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ΤI Methods to identify compounds affecting mitochondria

The present invention relates to methods for identifying a compound AB capable of modulating mitochondrial function, comprising contacting a eukaryotic cell with one or more candidate compounds, and detecting a change in the mitochondrial redox state of the cell. The methods further relates to such methods wherein endogenous fluorescence of the cell mitochondria is indicative of a change of redox state.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 10 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:30273 USPATFULL

TITLE: Methods and compositions for modulating adenosine

triphosphate (ATP) in cells and preventing cell injury

or death via post-translational modifications to

ATP synthase

INVENTOR(S): Van Eyk, Jennifer E., Kingston, CANADA

Arrell, David Kent, Kingston, CANADA

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 2003022220 A1 20030130 APPLICATION INFO.: US 2002-189820 A1 20020703 (10)

NUMBER DATE \_\_\_\_\_

PRIORITY INFORMATION: US 2001-303491P 20010706 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

Licata & Tyrrell P.C., 66 E. Main Street, Marlton, NJ, LEGAL REPRESENTATIVE:

08053

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 8 Drawing Page(s)

LINE COUNT: 762

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Methods and compositions for modulating adenosine triphosphate (ATP) in cells and preventing cell injury or death via post-translational

modifications to ATP synthase

Compositions and methods for modulating adenosine triphosphate (ATP) in AB

cells via altering post-translational modifications of ATP synthase subunits or precursors thereof such as the ATP synthase  $\beta$  chain and its precursor are provided. These compositions and methods are useful in preconditioning organs and preventing cell injury or cell death via regulating ATP synthesis or hydrolysis in cells of the organs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 11 OF 15 USPATFULL on STN

2001:18196 USPATFULL ACCESSION NUMBER:

Methods to identify compounds affecting mitochondria TITLE:

Marban, Eduardo, Lutherville, MD, United States INVENTOR(S):

O'Rourke, Brian, Sparks, MD, United States

Johns Hopkins University, Baltimore, MD, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_

PATENT INFORMATION:
APPLICATION INFO.:
DOCUMENT TYPE: US 6183948 B1 20010206 US 1998-60774 19980415 (9)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted
PRIMARY EXAMINER: Lankford, Jr., Leon B.

LEGAL REPRESENTATIVE: Corless, Peter F., Schray, Kerri P. Edwards & Angell,

 $_{\rm LLP}$ 

31 NUMBER OF CLAIMS: EXEMPLARY CLAIM:

14 Drawing Figure(s); 6 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1117

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ΤI Methods to identify compounds affecting mitochondria

The present invention relates to methods for identifying a compound AΒ capable of modulating mitochondrial function, comprising contacting a eukaryotic cell with one or more candidate compounds, and detecting a change in the mitochondrial redox state of the cell. The methods further relates to such methods wherein endogenous fluorescence of the cell mitochondria is indicative of a change of redox state.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 12 OF 15 Elsevier BIOBASE COPYRIGHT 2005 Elsevier Science B.V. L4

on STN

2004278351 ESBIOBASE ACCESSION NUMBER: TITLE: F.sub.0F.sub.1 ATP synthase activity is differently modulated by coronary reactive

hyperemia before and after ischemic

preconditioning in the goat

Penna C.; Pagliaro P.; Rastaldo R.; Di Pancrazio F.; AUTHOR:

Lippe G.; Gattullo D.; Mancardi D.; Samaja M.; Losano

G.; Mavelli I.

P. Pagliaro, Dipto. di Sci. Cliniche e Biologiche, CORPORATE SOURCE:

Universita di Torino, Ospedale S. Luigi, Regione

Gonzole, 10043 Orbassano (TO), Italy.

E-mail: pasquale.pagliaro@unito.it

American Journal of Physiology - Heart and Circulatory SOURCE:

Physiology, (2004), 287/5 56-5 (H2192-H2200), 48

reference(s)

CODEN: AJPPDI ISSN: 0363-6135

DOCUMENT TYPE:

Journal; Article United States

COUNTRY: LANGUAGE:

English

SUMMARY LANGUAGE:

English

F.sub.0F.sub.1 ATP synthase activity is differently modulated by coronary reactive hyperemia before and after ischemic

preconditioning in the goat

The amplitude of coronary reactive hyperemia (CRH), elicited by 15 s of AB ischemia, is reduced in hearts subjected to 5 min of ischemic preconditioning (IP). F.sub.0F.sub.1 ATP

synthase activity and ATP concentration are also altered by IP. We hypothesized that F.sub.0F.sub.1 ATP synthase is

differently modulated by the inhibitor protein IF.sub.1 during CRH elicited before (CRH.sub.n.sub.p) and after (CRH.sub.p.sub.r.sub.e.sub.c)

IP. Hemodynamic parameters were recorded in 10 anesthetized goats. Myocardial biopsies were obtained before IP (C.sub.n.sub.p), during CRH.sub.n.sub.p, 4 and 6 min after the onset of CRH.sub.n.sub.p, after IP

(C.sub.p.sub.r.sub.e.sub.c), during CRH.sub.p.sub.r.sub.e.sub.c, and 4 min after CRH.sub.p.sub.r.sub.e.sub.c. F .sub.0F.sub.1 ATP

synthase activity, ATP concentration, and ATP-to-ADP ratio (ATP/ADP) were determined. Compared with CRH.sub.n.sub.p, IP blunted

CRH.sub.p.sub.r.sub.e.sub.c. F.sub.0F.sub.1 ATP synthase activity transiently increased during CRH.sub.n.sub.p, decreased 4 min after CRH .sub.n.sub.p, and returned to control 2 min later; it was lower after IP (C.sub.p.sub.r.sub.e.sub.c) and did not change during and after CRH.sub.p.sub.r.sub.e.sub.c. All these changes in activity were modulated by IF.sub.1. During CRH .sub.n.sub.p, ATP concentration and ATP/ADP were reduced compared with C .sub.n.sub.p and began to rise 6 min thereafter. During C.sub.p.sub.r.sub.e.sub.c, both parameters were transiently reduced but increased during and after CRH

.sub.p.sub.r.sub.e.sub.c. Hence, during CRH.sub.n.sub.p, F.sub.0F.sub.1 ATP synthase activity transiently increases and then decreases significantly. The short-lasting inhibition of the enzyme may explain why a few seconds of occlusion do not induce IP. After IP, F.sub.OF.sub.1 ATP synthase activity is blunted, and

it is not affected by a subsequent 15 s of occlusion, which induces a blunted CRH.sub.p.sub.r.sub.e.sub.c. These results suggest that postischemic long-lasting inhibition of F.sub.0F.sub.1 ATP synthase activity may be a feature of the preconditioned heart. The increase in ATP concentration after preconditioning is in

agreement with previous reports of reduced ATP hydrolysis by cytoplasmic ATPases.

L4ANSWER 13 OF 15 Elsevier BIOBASE COPYRIGHT 2005 Elsevier Science B.V. on STN

ACCESSION NUMBER:

2004213219 **ESBIOBASE** 

TITLE:

Multiprotein complex containing succinate dehydrogenase confers mitochondrial ATP-sensitive K.sup.+ channel activity

Ardehali H.; Chen Z.; Ko Y.; Mejia-Alvarez R.; Marban AUTHOR:

CORPORATE SOURCE: E. Marban, 844 Ross Building, Johns Hopkins

University, 720 Rutland Avenue, Baltimore, MD 21205,

United States.

E-mail: marban@jhmi.edu

Proceedings of the National Academy of Sciences of the SOURCE:

United States of America, (10 AUG 2004), 101/32

(11880-11885), 31 reference(s) CODEN: PNASA6 ISSN: 0027-8424

DOCUMENT TYPE: COUNTRY:

Journal; Article United States

LANGUAGE: SUMMARY LANGUAGE: English English

Multiprotein complex containing succinate dehydrogenase confers mitochondrial ATP-sensitive K.sup.+ channel activity

The mitochondrial ATP-sensitive K.sup.+ (mitoK.sub.A.sub.T.sub.P) channel AΒ plays a central role in protection of cardiac and neuronal cells against ischemia and apoptosis, but its molecular structure is unknown. Succinate dehydrogenase (SDH) is inhibited by mitoK.sub.A.sub.T.sub.P activators, fueling the contrary view that SDH, rather than mitoK.sub.A.sub.T.sub.P, is the target of cardioprotective drugs. Here, we report that SDH forms part of mitoK .sub.A.sub.T.sub.P functionally and structurally. Four mitochondrial proteins [mitochondrial ATP-binding cassette protein 1 (mABC1), phosphate carrier, adenine nucleotide translocator, and ATP synthase] associate with SDH. A purified IM fraction containing these proteins was reconstituted into proteoliposomes and lipid bilayers and shown to confer mitoK.sub.A.sub.T.sub.P channel activity. This channel activity is sensitive not only to mitoK .sub.A.sub.T.sub.P activators and blockers but also to SDH inhibitors. These results reconcile the controversy over the basis of ischemic preconditioning by demonstrating that SDH is a component of mitoK.sub.A.sub.T.sub.P as part of a macromolecular super-complex. The findings also provide a tangible clue as to the structural basis of mitoK.sub.A.sub.T.sub.P channels.

L4ANSWER 14 OF 15 Elsevier BIOBASE COPYRIGHT 2005 Elsevier Science B.V. on STN

ACCESSION NUMBER:

2003289067 ESBIOBASE

TITLE:

ATP-sensitive K.sup.+ channels in renal

mitochondria

AUTHOR:

Cancherini D.V.; Trabuco L.G.; Reboucas N.A.;

Kowaltowski A.J.

CORPORATE SOURCE:

A.J. Kowaltowski, Cidade Universitaria, Av. Prof. Lineu Prestes, 748, 05508-900, Sao Paulo, Brazil.

E-mail: alicia@iq.usp.br

SOURCE:

American Journal of Physiology - Renal Physiology, (2003), 285/6 54-6 (F1291-F1296), 38 reference(s)

CODEN: AJPPFK ISSN: 0363-6127

DOCUMENT TYPE:

Journal; Article United States

COUNTRY: LANGUAGE:

English

SUMMARY LANGUAGE:

English

ATP-sensitive K.sup.+ channels in renal mitochondria TI

Isolated kidney mitochondria swell when incubated in hyposmotic AB solutions containing K.sup.+ salts in a manner inhibited by ATP, ADP, 5-hydroxydecanoate, and glibenclamide and stimulated by GTP and diazoxide. These results suggest the existence of ATP-sensitive K.sup.+ channels in these mitochondria, similar to those previously described in heart, liver, and brain. Renal mitochondrial ATP-sensitive K.sup.+ uptake rates are .apprx.140 nmol.midldot.min.sup.-.sup.1-mg protein.sup.-.sup.1. This K .sup.+ transport results in a slight increase in respiration and decrease in the inner membrane potential. In addition,

the activation of ATP-inhibited K.sup.+ uptake using diazoxide leads to a decrease of ATP hydrolysis through the reverse activity of the F.sub.0F.sub.1 ATP synthase when respiration is inhibited. In conclusion, we characterize an ATP-sensitive K.sup.+ transport pathway in kidney mitochondria that affects volume, respiration, and membrane potential and may have a role in the prevention of mitochondrial ATP hydrolysis.

ANSWER 15 OF 15 Elsevier BIOBASE COPYRIGHT 2005 Elsevier Science B.V. L4

on STN

ACCESSION NUMBER: 2002273905 ESBIOBASE

Halothane, isoflurane and sevolfurane inhibit TTTLE:

NADH: Ubiquinone

oxidoreductase (complex I) of cardiac

mitochondria

Hanley P.J.; Ray J.; Brandt U.; Daut J. AUTHOR:

J. Daut, Institute of Physiology, Marburg University, CORPORATE SOURCE:

Deutschhausstrasse 2, 35037 Marburg, Germany.

E-mail: daut@mailer.uni-marburg.de

Journal of Physiology, (01 NOV 2002), 544/3 (687-693), SOURCE:

40 reference(s)

CODEN: JPHYA7 ISSN: 0022-3751

Journal; Article DOCUMENT TYPE: COUNTRY: United Kingdom

LANGUAGE: English English SUMMARY LANGUAGE:

Halothane, isoflurane and sevolfurane inhibit NADH: Ubiquinone oxidoreductase (complex I) of cardiac mitochondria

We have investigated the effects of volatile anaesthetics on electron  $\cdot AB$ transport chain activity in the mammalian heart. Halothane, isoflurane and sevoflurane reversibly increased NADH fluorescence (autofluorescence) in intact ventricular myocytes of guinea-pig, suggesting that NADH oxidation was impaired. Using pig heart submitochondrial particles we found that the anaesthetics dose-dependently inhibited NADH oxidation in the order: halothane > isoflurane = sevoflurane. Succinate oxidation was unaffected by either isoflurane or sevoflurane, indicating that these agents selectively inhibit complex I (NADH:ubiquinone oxidoreductase). In addition to inhibiting NADH oxidation, halothane also inhibited succinate oxidation (and succinate dehydrogenase), albeit to a lesser extent. To test the hypothesis that complex I is a target of volatile anaesthetics, we examined the effects of these agents on NADH:ubiquinone

oxidoreductase (EC 1.6.99.3) activity using the ubiquinone analogue DBQ (decylubiquinone) as substrate. Halothane, isoflurane and sevoflurane dose-dependently inhibited NADH: DBQ oxidoreductase activity. Unlike the classical inhibitor rotenone, none of the anaesthetics completely inhibited enzyme activity at high concentration, suggesting that these agents bind weakly to the 'hydrophobic inhibitory site' of complex I. In conclusion, halothane, isoflurane and sevoflurane inhibit complex I (NADH:ubiquinone oxidoreductase)

of the electron transport chain. At concentrations of .apprx.2 MAC (minimal alveolar concentration), the activity of NADH:

ubiquinone oxidoreductase was reduced by about 20% in the presence of halothane or isoflurane, and by about 10% in the presence of sevoflurane. These inhibitory effects are unlikely to compromise cardiac performance at usual clinical concentrations, but may contribute to the mechanism by which volatile anaesthetics induce pharmacological preconditioning.

=> s arrell,d?/au
16 76 ARRELL,D?/AU

=> s elliott,s?/au
17 3875 ELLIOTT,S?/AU

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18 0 L5 AND L6 AND L7

=> s eyk,j?/au
19 6 EYK,J?/AU

=> s L9 AND L7 AND L8

0 L9 AND L7 AND L8

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(FILE 'HOME' ENTERED AT 14:23:43 ON 09 MAY 2005)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, ...' ENTERED AT 14:23:54 ON 09 MAY 2005 SEA PRECONDITIONING

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     ESBIOBASE, TOXCENTER' ENTERED AT 14:25:03 ON 09 MAY 2005
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L13 ANSWER 1 OF 2
                      MEDLINE on STN
     [Molecular modifications of troponin I and T detected in serum from
     patients with acute myocardial infarction].
     Molekylaere forandringer af troponin I og T pavist i serum hos patienter
     med akut myokardieinfarkt.
L13 ANSWER 2 OF 2 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
     Identification of myofilament proteins that are degraded and/or released
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during ischemia/reperfusion: Effects on the pCa-force relation.

## => d l13 ibib ti abs 1-2

L13 ANSWER 1 OF 2 MEDLINE on STN

ACCESSION NUMBER: 2003044477 MEDLINE DOCUMENT NUMBER: PubMed ID: 12553091

TITLE: [Molecular modifications of troponin I and T detected in

serum from patients with acute myocardial infarction].
Molekylaere forandringer af troponin I og T pavist i serum

hos patienter med akut myokardieinfarkt.

AUTHOR: Atar Dan; Madsen Lene Helleskov; Labugger Ralf; VanEyk

Jennifer E

CORPORATE SOURCE: H:S Frederiksberg Hospital, kardiologisk klinik E, DK-2000

Frederiksberg.. datar@dadlnet.dk

SOURCE: Ugeskrift for laeger, (2003 Jan 6) 165 (2) 116-20.

Journal code: 0141730. ISSN: 0041-5782.

PUB. COUNTRY: Denmark

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Danish

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200302

ENTRY DATE: Entered STN: 20030130

Last Updated on STN: 20030228 Entered Medline: 20030227

TI [Molecular modifications of troponin I and T detected in serum from patients with acute myocardial infarction].

Molekylaere forandringer af troponin I og T pavist i serum hos patienter med akut myokardieinfarkt.

INTRODUCTION: Cardiac troponin I and T (cTnI and cTnT) are specific AB biochemical serum markers for acute myocardial infarction (AMI). However, cTnI diagnostic assays are plagued by difficulties, resulting in > 20-fold differences in measured values. These discrepancies may result from the release of the numerous cTnI modification products that are present in ischaemic myocardium. The resolution of these discrepancies requires an investigation of the exact forms of the troponins present in the bloodstream of patients after myocardial injury. MATERIAL AND METHODS: A Westernblot direct serum analysis protocol was developed that allowed us to detect intact cTnI and a spectrum of up to 11 modified products in the serum from patients with AMI. RESULTS: We document both a cTnI degradation pattern and the existence of phosphorylated cTnI in serum. The number and extent of these modifications reflect patterns similar to the time profiles of the routine clinical serum markers of total creatine kinase, creatine kinase-MB, and cTnI (determined by ELISA). Data from in vitro experiments, which were undertaken to study the degradation of human recombinant cTnI and cTnT when spiked in serum, indicate that some modification products present in patient serum existed in the myocardium. DISCUSSION: This pilot study defines, for the first time, what forms of cTnI and cTnT appear in the bloodstream of AMI patients, and it clarifies the lack of standardization between different cTnI diagnostic assays.

L13 ANSWER 2 OF 2 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1997:4179 BIOSIS DOCUMENT NUMBER: PREV199799303382

TITLE: Identification of myofilament proteins that are degraded

and/or released during ischemia/reperfusion: Effects on the

pCa-force relation.

AUTHOR(S): Vaneyk, Jennifer E. [Reprint author]; Powers,

Francis M.; Law, William R.; Hodges, Robert S.; Solaro, R.

John

CORPORATE SOURCE: Univ. Ill., Chicago, IL, USA

SOURCE: Circulation, (1996) Vol. 94, No. 8 SUPPL., pp. 1365.

Meeting Info.: 69th Scientific Sessions of the American Heart Association. New Orleans, Louisiana, USA. November

10-13, 1996.

CODEN: CIRCAZ. ISSN: 0009-7322.

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 7 Jan 1997

Last Updated on STN: 7 Jan 1997

TI Identification of myofilament proteins that are degraded and/or released during ischemia/reperfusion: Effects on the pCa-force relation.

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(FILE 'HOME' ENTERED AT 14:23:43 ON 09 MAY 2005)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, ...' ENTERED AT 14:23:54 ON 09 MAY 2005 SEA PRECONDITIONING

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     ESBIOBASE, TOXCENTER' ENTERED AT 14:25:03 ON 09 MAY 2005
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L2
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L3
             15 S L3 AND (ISOCITRATE(W)DEHYDROGENASE(W)NAD(W)ALPHA(W)SUBUNIT O
L4
L5
             72 S VANEYK, J?/AU
L6
             76 S ARRELL, D?/AU
L7
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L8
              0 S L5 AND L6 AND L7
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L10
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L11
L12
              2 S VANEYK, JENNIFER?/AU
L13
              2 DUP REM L12 (0 DUPLICATES REMOVED)
=> s L6 AND L7
L14
             5 L6 AND L7
=> dup rem 114
PROCESSING COMPLETED FOR L14
L15
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=> d 115 ibib ti abs 1-5
L15 ANSWER 1 OF 5 USPATFULL on STN
ACCESSION NUMBER:
                         2004:327968 USPATFULL
TITLE:
                        Methods and compositions for modulating proteins
                        modified in preconditioning against ischemia/hypoxia
                        Eyk, Jennifer E. Van, Baltimore, MD, UNITED STATES
INVENTOR(S):
                          Elliott, Steven T., Cockeysville, MD, UNITED
                         STATES
                          Arrell, David Kent, Rochester, MN, UNITED
                         STATES
```

NUMBER KIND DATE

US 2004259793 A1 20041223 PATENT INFORMATION:

APPLICATION INFO.: US 2004-824027 A1 20040414 (10)

NUMBER DATE

US 2003-463139P 20030414 (60). PRIORITY INFORMATION:

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: Licata & Tyrrell P.C., 66 East Main Street, Marlton,

NJ, 08053

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Page(s)

1334 LINE COUNT:

Methods and compositions for modulating proteins modified in

preconditioning against ischemia/hypoxia

Proteins modified by pharmacological preconditioning are provided. AΒ Compositions, methods and events for modulating these proteins and priming cells for preconditioning and inducing preconditioning in a cell, tissue or organ as well as methods for identifying new compositions and methods for such priming and induction are also provided. In addition, methods for diagnosing and monitoring preconditioning or ischemic, hypoxic, ischemic/reperfusion and hypoxic/reperfusion conditions or the ability of a cell, tissue or organ to survive injury by measuring modulation of one or more of these preconditioning proteins are provided.

L15 ANSWER 2 OF 5 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER:

2004:40526 BIOSIS PREV200400041897

DOCUMENT NUMBER: TITLE:

2-Dimensional gel electrophoresis proteomic database of

rabbit ventricular myocytes.

AUTHOR(S): Elliott, S. [Reprint Author]; Arrell, D.

> Kent [Reprint Author]; Doherty-Kirby, A.; Brown, H. [Reprint Author]; Lajoie, G.; Marban, E.; Van Eyk, J.

[Reprint Author]

CORPORATE SOURCE:

Queen's University, Kingston, ON, Canada

SOURCE:

Molecular & Cellular Proteomics, (September 2003) Vol. 2,

No. 9, pp. 835. print.

Meeting Info.: HUPO (Human Proteomics Organisation) 2nd Annual and IUBMB (International Union of Biochemistry and Molecular Biology) XIX World Congress. Montreal, Quebec,

Canada. October 08-11, 2003. American Society for

Biochemistry and Molecular Biology Inc.

ISSN: 1535-9476 (ISSN print).

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

L'ANGUAGE:

English

ENTRY DATE:

Entered STN: 14 Jan 2004

Last Updated on STN: 14 Jan 2004

2-Dimensional gel electrophoresis proteomic database of rabbit ventricular TΙ myocytes.

L15 ANSWER 3 OF 5 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER:

2002:162755 SCISEARCH

THE GENUINE ARTICLE: 511EY

TITLE:

Preconditioning post-translationally modifies cardiac

mitochondrial F1Fo ATPase subunit

Arrell D K (Reprint); Neverova I; Elliott S AUTHOR:

T; Turcotte A; Van Eyk J E

Queens Univ, Kingston, ON K7L 3N6, Canada CORPORATE SOURCE:

COUNTRY OF AUTHOR:

Canada

SOURCE: BIOPHYSICAL JOURNAL, (JAN 2002) Vol. 82, No. 1, Part 2,

pp. 611A-611A. MA 2986.

Publisher: BIOPHYSICAL SOCIETY, 9650 ROCKVILLE PIKE,

BETHESDA, MD 20814-3998 USA.

ISSN: 0006-3495. Conference; Journal

DOCUMENT TYPE:

LANGUAGE:

English

REFERENCE COUNT:

Preconditioning post-translationally modifies cardiac mitochondrial F1Fo ATPase subunit

L15 ANSWER 4 OF 5 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:365381 BIOSIS PREV200200365381 DOCUMENT NUMBER:

Preconditioning post-translationally modifies cardiac TITLE:

mitochondrial F1Fo ATPase beta subunit.

Arrell, D. Kent [Reprint author]; Neverova, Irina AUTHOR(S):

[Reprint author]; Elliott, Steven T. [Reprint

author]; Turcotte, Antony [Reprint author]; Van Eyk,

Jennifer E. [Reprint author]

CORPORATE SOURCE: Queen's University, 414 Botterell Hall, Kingston, Ontario,

K7L 3N6, Canada

Biophysical Journal, (January, 2002) Vol. 82, No. 1 Part 2, SOURCE:

pp. 611a. print.

Meeting Info.: 46th Annual Meeting of the Biophysical Society. San Francisco, California, USA. February 23-27,

2002.

CODEN: BIOJAU. ISSN: 0006-3495.

Conference; (Meeting) DOCUMENT TYPE:

Conference; Abstract; (Meeting Abstract)

Conference; (Meeting Poster)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Jul 2002

Last Updated on STN: 3 Jul 2002

Preconditioning post-translationally modifies cardiac mitochondrial F1Fo ATPase beta subunit.

L15 ANSWER 5 OF 5 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on

STN

ACCESSION NUMBER: 2002:687876 SCISEARCH

THE GENUINE ARTICLE: 579YR

Proteomic analysis of preconditioning reveals TITLE:

post-translational modification of the F1F0 ATPase beta

subunit

AUTHOR: Arrell D K (Reprint); Elliott S;

Neverova I; Marban E; Van Eyk J E

Queens Univ, Dept Physiol, Kingston, ON, Canada; Queens CORPORATE SOURCE:

Univ, Dept Biochem, Kingston, ON, Canada; Johns Hopkins

Univ, Inst Mol Cardiobiol, Baltimore, MD USA

COUNTRY OF AUTHOR:

Canada; USA

JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY, (JUL 2002) SOURCE:

Vol. 34, No. 7, pp. A33-A33.

Publisher: ACADEMIC PRESS LTD ELSEVIER SCIENCE LTD, 24-28

OVAL RD, LONDON NW1 7DX, ENGLAND.

ISSN: 0022-2828.

DOCUMENT TYPE: Conference; Journal

LANGUAGE: English

REFERENCE COUNT:

Proteomic analysis of preconditioning reveals post-translational

modification of the F1F0 ATPase beta subunit

=> FIL STNGUIDE COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 132.69 134.08 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION -1.46-1.46 CA SUBSCRIBER PRICE

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LAST RELOADED: May 6, 2005 (20050506/UP).

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(FILE 'HOME' ENTERED AT 14:23:43 ON 09 MAY 2005)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, ...' ENTERED AT 14:23:54 ON 09 MAY 2005 SEA PRECONDITIONING

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18	FILE	ADISINSIGHT
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70	FILE	ANABSTR
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15	FILE	CIN
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59		CROPU
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869	FILE	DDFU
76	FILE	
553	FILE	DISSABS
5	FILE	DRUGB
994	FILE	DRUGU
82	FILE	EMBAL
4241	FILE	EMBASE
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65	FILE	FROSTI

FILE FSTA

98

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61
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                  FILE USPATFULL
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                   FILE USPAT2
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L3
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L4
             72 S VANEYK, J?/AU
L5
L6
             76 S ARRELL, D?/AU
L7
           3875 S ELLIOTT, S?/AU
rs
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              6 S EYK, J?/AU
L9
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             0 S VANEYK, JENNIFER/AU
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L12
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L14
              5 S L6 AND L7
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              5 DUP REM L14 (0 DUPLICATES REMOVED)
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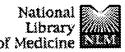
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FULL ESTIMATED COST	0.54	134.62
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Entrez PubMed Page 1 of 1







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	About Entrez	• To combine							
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	Overview Help   FAQ	#27 Search	#1 AND		-	J	10:41:42	<u>0</u>	
	Tutorial New/Noteworthy			\ <b>-</b>	<del></del> -	D alpha subunit		51	
	E-Utilities	#21 Search (isocitrate dehydrogenase NAD alpha subunit 10:34:51 51 OR succinyl CoA ligase OR NADH ubiquinone							
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	NLM Gateway TOXNET Consumer Health Clinical Alerts	#6 Search OR su	ı isocitrat	e dehydro A ligase (		D alpha subunit ıbiquinone	09:30:35	3138	
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#1 Search level of isocitrate dehydrogenase NAD

Clear History

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09:24:22